Discussion of
"Trust and Contracts: Empirical Evidence"

by D'Acunto, Xie, and Yao

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Summary and Main Contributions

- This paper studies how trust that principal places on agent affects contract completeness.
    - use textual LDA topic modeling to measure contract completeness
    - exploit the Arthur Andersen scandal in 2002 as a negative shock to small shareholders' trust in big business
    - find that lower trust increases contract completeness

- Very important research question!

- Contributions:
    - text-based empirical measure of contract completeness
        - easy to implement!
    - our understanding of the effect of trust in economic transactions
    - potential economic consequences of trust erosion

My discussion

- Comment 1: measuring contract completeness

- Comment 2: Arthur Andersen scandal and trust erosion

- Comment 3: use treatment heterogeneity to improve Weak IV

Comment 1: LDA and Completeness

- The authors measure contract completeness based on the number of topics the contract covers
    - it represents the number of contingencies in a contract

- The authors use textual LDA topic modeling to extract the number of topics from contract texts

- An important feature of the LDA procedure: an upfront decision about the optimal number of total topics (correspond to the total number of possible contingencies)

- Is there a time-series (or cross-industry) variation in the total number of contingencies (amount of topics) ?

Comment 1: LDA and Completeness

- The authors assume that the total number of contingencies is fixed.

- The number is chosen optimally at 200 according to *perplexity score*
  - train the LDA model using all contracts sample from 1995 to 2015

- However, could the total number of contingencies change?

- For example, digital patents, including software code (even NFT), may be included as contingencies in the contract. At the same time, some of the concepts may not appear if we only train the earlier sample or a particular industry.

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Comment 1: LDA and Completeness

- Given that the authors exploit a DID setting, this may not invalidate these results.

- But it leads to different interpretations.
    - 100 total but 50 are included in contracts
    - 200 total contingencies but 80 are included in contracts

- One possible solution:
    - split the sample by year, and dynamically choose the optimal number of topics

- One more concern:
    - could the percentage of verifiable topics over total topics change over time?
        - total topics measure contract complexity; verifiable topics measure contract completeness

Comment 2: Trust in Management

- The authors exploit the Arthur Andersen scandal in 2002 as a negative shock to small shareholders' trust in big business.

- Giannetti and Wang (2016) document that the Arthur Anderson scandal leads to a decrease in households' trust in the management
    - shareholders decide to exit their investment in public companies

- Shareholders who do not liquidate their shares
    - trust management enough to not liquidate their shares
    - trust in business practices dropped

- Though plausible, could the authors provide more evidence to support this channel?

Comment 2: Trust in Business

- Analyze what happens to Arthur Andersen clients vs non-Arthur Andersen clients?

- Shareholders are more likely to lose trust in management for Arthur Anderson clients.
    - management team who hired Arthur Andersen

- Shareholders are less likely to lose trust in management for non-Arthur Andersen clients.
    - management team who did not hire Arthur Andersen
    - the revelation of the scandal leads to a general trust erosion in business practices

Comment 3: Weak IV Treatment Heterogeneity

- The authors use IV analysis aggregating individual-level trust at the state level to rule out additional unobserved channels.

- The AA instrument is weak. Therefore the authors do not use it as the main empirical specification.

- My comment: Could we use the heterogeneous response of the AA scandal to solve the weak instrument concern and further sharpen the trust channel?

Comment 3: Weak IV Treatment Heterogeneity

- Individual responds differently to aggregate shock. (Meeuwis et al. (2018))

- Use the households' heterogeneous response of the AA scandal to sharpen the trust channel
    - Assume X individuals are more likely to have a decrease in trust in big businesses after the scandal
    - X is individual characteristic, e.g., demographic information

- If increased exposure affects contract completeness through the decrease in trust in big businesses, areas with higher X share will have larger increases in contract completeness after the scandal.

- Add triple interaction
$$y_{,c,t} = \beta AAExposure_c \times Post_t \times X_c + \gamma_1 AAExposure_c \times Post_t + \gamma_2 Post_t \times X_c + Control_{,c,t} + \lambda_c + \delta_t + \varepsilon_{c,t}$$

- predict positive β (captures the additional change of contract completeness for counties with high X share)

Comment 3: Weak Instrument Treatment Effect Heterogeneity

- How to select individuals with heterogeneous responses?

- One possibility is political affiliation. (Yang (2021))
    - Individual's response could depends on the ex-ante belief in trust in big business
    - Non-Republican individuals have lower trust in big business
    - Use political affiliation to proxy for the ex-ante belief in trust in big business

- Of course, other characteristics are also possible.

- The same specification could be used to make the instrument stronger.

Conclusion

- Fascinating Paper!

- Help us understand contract completeness and the role of trust.

- Hope my comments will help with the next version of the paper.

Appendix

References I

Giannetti, M., Wang, T. Y., 2016. Corporate scandals and household stock market participation. The Journal of Finance 71, 2591–2636.

Meeuwis, M., Parker, J. A., Schoar, A., Simester, D. I., 2018. Belief disagreement and portfolio choice. Tech. rep., National Bureau of Economic Research.

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